



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,643	10/19/2001	Mika Jokinen	TUR -115	4103

32954 7590 03/09/2005

JAMES C. LYDON
100 DAINGERFIELD ROAD
SUITE 100
ALEXANDRIA, VA 22314

EXAMINER

FUBARA, BLESSING M

ART UNIT	PAPER NUMBER
----------	--------------

1615

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HL

Office Action Summary

Application No.

09/913,643

Applicant(s)

JOKINEN ET AL.

Examiner

Blessing M. Fubara

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16 and 18-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16 and 18-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner acknowledges receipt of English translation of DE 196 09 551 filed 12/22/04. Examiner further acknowledges receipt of amendment and remarks filed 11/26/04. Claims 16 and 18-34 are pending and of these, claims 16 and 20 are amended and claim 34 is a new claim.

Claim Rejections - 35 USC § 102

1. The rejection of claims 1 and 3-7 under 35 U.S.C. 102(b) as being anticipated by Lin et al. (US 4,919,871) is withdrawn because claims 1 and 3-7 are canceled.
2. Claims 24-34 remain rejected under 35 U.S.C. 102(b) as being anticipated by Ahola et al. (WO 97/45367).

Applicants argue that in Ahola's method, the starting sol is at a viscosity of 10 Mpas and that Ahola fails to disclose that fibres spun from an early stage of the spinning process degrade more slowly than fibres spun in a later stage. Applicants further argue that Ahola fails to expressly disclose or suggest solubility of the fibres in simulated body fluid of 0.2 to 20 wt-%/h and that Ahola fails to inherently disclose the claimed fibres because Ahola fails to disclose the viscosity range employed to make the fibres.

3. Applicants' arguments filed 11/26/04 have been fully considered but they are not persuasive.

It is a relative assessment that fibres spun from an early stage degrade more slowly than fibres spun at a later stage without reciting the values/times for how long it takes for the fibres, spun at the early stage and at a later stage to degrade. Secondly, the solubility of fibres in simulated body fluid of 0.2 to 20 wt%/h is an inherent property of the silica fibre. In the claims 24-33, no specific concentration of the silica sol is claimed that supports the recited solubility so

Art Unit: 1615

that a silica sol of the prior art would not have that property. Claims 16 and 18-23 are not included in the rejection or rather, the anticipatory rejection by Ahola of claims 16 and 18-23 is withdrawn because Ahola while disclosing the starting spinning viscosity of 10 Mpas does not further disclose the viscosity of the spinning silica sol.

Claim Rejections - 35 USC § 103

4. Claims 16 and 18-34 remain rejected under 35 U.S.C. 103(a) as being unpatentable over DE 196 09 51, English translation provided by applicants.

Applicants state that the DE reference fails to disclose or suggest that controlling the viscosity of the spinning solution from which the fibre is spun would permit “adjustment of the fibre’s biodegradability in simulated body fluid” and that the solubility of the silica fibre in simulated body fluid is 0.2 to 20 wt%/h so that the slower (lower) dissolution limit will result in complete fibre dissolution in about 21 days instead of the 50 days it takes for the DE fibre to dissolve.

5. Applicants' arguments filed 11/26/04 have been fully considered but they are not persuasive.

The claims do not recite how long it takes the fiber to dissolve and the method is not directed to how to make the fiber to dissolve. The product claims are broad generic claims directed to silica fibre spun from silica sol without recitation of concentration/amount of the silica sol that ensures specific dissolution time/rate unique only to the claimed fibre. The dissolution rate of 0.2 to 20 wt%/h is recited in the product claims and dissolution is a property of the fibre in the product claims. Also applicants provided no showing that fibre that dissolves completely within 21 days has unusual advantages over fiber that dissolves within 50 days. A

Art Unit: 1615

viscosity of 800 Mpas is close to the lower limit of 1,000 Mpas and there is no showing that a viscosity of 1,000 Mpas is critical over a viscosity of 800 Mpas.

No claim is allowed.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 3:30 p.m. (Monday to Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-272-1600.

Art Unit: 1615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Blessing Fubara
Patent Examiner
Tech. Center 1600



THURMAN K. PAGE
SUPERVISOR/PATENT EXAMINER
TECHNOLOGY CENTER 1600